



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,960	12/04/2003	John R. Squilla	84591DMW	7396

7590 05/31/2006

Pamela R. Crocker  
Patent Legal Staff  
Eastman Kodak Company  
343 State Street  
Rochester, NY 14650-2201

EXAMINER

RAO, ANAND SHASHIKANT

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/727,960

Applicant(s)

SQUILLA ET AL

Examiner

Andy S. Rao

Art Unit

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-9 and 11 is/are rejected.
- 7) ☒ Claim(s) 5 and 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/4/03</u> . | 6) <input type="checkbox"/> Other: ____.  |

## DETAILED ACTION

### *Specification*

1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 6-9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper in view of DiRe.

Cooper discloses a portable intra-oral capture and display system for use by a dental practitioner in connection with a patient (Cooper: figure 1), said system comprising: a handpiece elongated for insertion into an oral cavity of the patient (Cooper: paragraph [0035], lines 1-5), said handpiece including a light emitter on a distal end thereof for illuminating an object in the cavity and an image sensor for capturing an image of the object and generating an image signal therefrom (Cooper: paragraph [0035], lines 6-12); a monitor interconnected with the handpiece, said monitor containing electronics for processing the image for display (Cooper: paragraph [0024], line 1), and a display element for displaying the image, where the interconnection between the monitor and the handpiece includes an electrical connection for communicating the

Art Unit: 2621

image signal from the image sensor in the camera to the electronics in the monitor (Cooper: paragraph [0048], lines 1-10), as in claim 1. However, Cooper fails to disclose the use of handpiece with a dental chair including a receptacle on the dental chair for receiving the monitor, wherein the receptacle conforms to the monitor such that the monitor may be withdrawn from the receptacle in order to allow the display element to be seen by the dental practitioner or the patient, as in claim 1. DiRe discloses the a dental chair (DiRe: paragraph [0016], lines 1-7) including a receptacle on the dental chair for receiving the monitor (DiRe: paragraph [0018], lines 1-12), wherein the receptacle conforms to the monitor such that the monitor may be withdrawn from the receptacle in order to allow the display element to be seen by the dental practitioner or the patient (DiRe: paragraph [0020], lines 1-12) in order allow for the patient to view the procedure simultaneously with practitioner (DiRe: paragraph [0027], lines 1-14). Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art to incorporate the DiRe dental chair into the Cooper imaging system in order to allow for simultaneously viewing by both the patient and the practitioner. The Cooper system, now incorporating the DiRe dental chair has all of the features of claim 1.

Regarding claim 2, the Cooper system, now incorporating the DiRe dental chair has the dental chair includes an armrest and the receptacle is mounted underneath the armrest such that the monitor may be withdrawn from the receptacle from under the armrest for easy viewing by the patient or dental practitioner (DiRe: paragraph [0025], lines 1-12), as in the claim.

Regarding claim 3, the Cooper system, now incorporating the DiRe dental chair has wherein the monitor is hinged to the receptacle such that the monitor may be withdrawn from the

Art Unit: 2621

receptacle and tilted upwards for easy viewing by the patient or dental practitioner (DiRe: paragraph [0031], lines 1-10), as in the claim.

Regarding claim 4, the Cooper system, now incorporating the DiRe dental chair has wherein the interconnection between the monitor and the handpiece is a wireless correction and the monitor may be completely withdrawn from the receptacle in order to allow the monitor to be handheld by the dental practitioner or the patient (Cooper: paragraph [0048], lines 1-7), as in the claim.

Regarding claim 6, the Cooper system, now incorporating the DiRe dental chair has a portable monitor includes a screen for displaying touch screen controls together with the image, and a touch screen interface for providing a plurality of touch screen controls that appear on the screen of the display monitor (DiRe: paragraph [0018], lines 1-7), as in the claim.

Cooper discloses portable display system for use by a dental practitioner in connection with a patient (Cooper: figure 1), said system comprising: a monitor containing electronics for processing an image for display and a display element for displaying the image (Cooper: paragraph [0024], line 1), as in claim 7. However, Cooper fails to disclose the use of handpiece with a dental chair including a receptacle on the dental chair for receiving the monitor, wherein the receptacle conforms to the monitor such that the monitor may be withdrawn from the receptacle in order to allow the display element to be seen by the dental practitioner or the patient, as in claim 1. DiRe discloses the a dental chair (DiRe: paragraph [0016], lines 1-7) including a receptacle on the dental chair for receiving the monitor (DiRe: paragraph [0018], lines 1-12), wherein the receptacle conforms to the monitor such that the monitor may be withdrawn from the receptacle in order to allow the display element to be seen by the dental

Art Unit: 2621

practitioner or the patient (DiRe: paragraph [0020], lines 1-12) in order allow for the patient to view the procedure simultaneously with practitioner (DiRe: paragraph [0027], lines 1-14).

Accordingly, given this teaching, it would have been obvious for one of ordinary skill in the art to incorporate the DiRe dental chair into the Cooper imaging system in order to allow for simultaneously viewing by both the patient and the practitioner. The Cooper system, now incorporating the DiRe dental chair has all of the features of claim 7.

Regarding claim 8, the Cooper system, now incorporating the DiRe dental chair has the dental chair includes an armrest and the receptacle is mounted underneath the armrest such that the monitor may be withdrawn from the receptacle from under the armrest for easy viewing by the patient or dental practitioner (DiRe: paragraph [0025], lines 1-12), as in the claim.

Regarding claim 9, the Cooper system, now incorporating the DiRe dental chair has wherein the monitor is hinged to the receptacle such that the monitor may be withdrawn from the receptacle and tilted upwards for easy viewing by the patient or dental practitioner (DiRe: paragraph [0031], lines 1-10), as in the claim.

Regarding claim 11, the Cooper system, now incorporating the DiRe dental chair has a portable monitor includes a screen for displaying touch screen controls together with the image, and a touch screen interface for providing a plurality of touch screen controls that appear on the screen of the display monitor (DiRe: paragraph [0018], lines 1-7), as in the claim.

***Allowable Subject Matter***

4. Claims 5 and 10 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Monroe discloses a remote hand-held diagnostic instrument with video imaging.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy S. Rao whose telephone number is (571)-272-7337. The examiner can normally be reached on Monday-Friday 8 hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571)-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/727,960  
Art Unit: 2621

Page 7

asr  
May 26, 2006

Andy S. Rao  
Primary Examiner  
Art Unit 2621

**ANDY RAO**  
**PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to read 'ASR', is written over the printed name and title of the examiner.